

COAXIAL CONNECTOR

Miniature SMT FSC Type

muRata

**Miniature, Low profile, 3mm height, SMD.
Right angle type receptacle available.**

FEATURES

1. High engagement with new structure (50% up compared with ESC type).
2. Ultra-miniature (LXWXH : 3.4X3.4X1.5mm) for High density mounting (11.6mm²).
3. Ultra-low profile (3.0mm Max.).
4. High performance. (VSWR 1.2max. at 2GHz).
5. Matched with ultra-thin FEP coaxial cables (0.8mm dia).
6. Mountable by automatic placer.
7. Taping package applicable.
8. SMD and reflow soldering applicable.

APPLICATIONS

Portable telephone, mobile telephone, cordless telephones, GPS, and other microwave radio and measurement equipment.

PART NUMBER

- Straight receptacle for printed circuit board.

Part Number	Packaging	Quantity
MM7329-2700	Bulk package	Free
MM7329-2700TB1	178mm Dia. Taping	1000pcs/reel
MM7329-2700TB2	330mm Dia. Taping	4000pcs/reel

- Right angle receptacle for printed circuit board.

Part Number	Packaging	Quantity
MM7329-2702	Bulk package	Free
MM7329-2702TB1	178mm Dia. Taping	500pcs/reel
MM7329-2702TB2	330mm Dia. Taping	2000pcs/reel

- Right angle cable assembly with flexible cable.

MXFK81□□□□□□

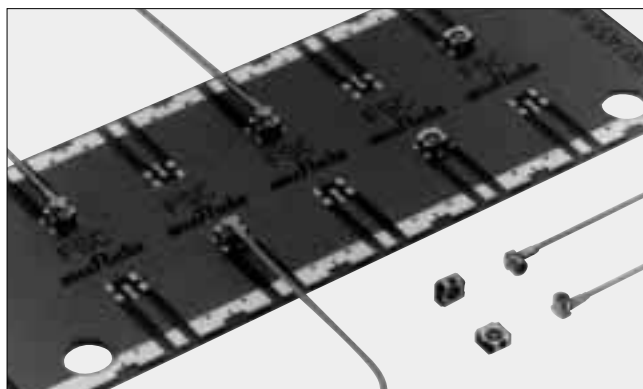
MXFG76□□□□□□

- SMA-FSC adapter for receptacle.

MM121454

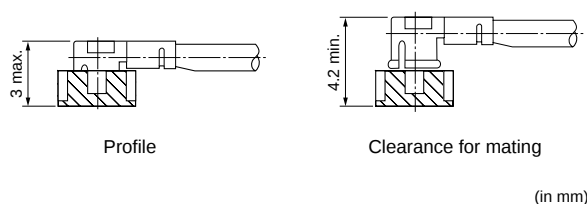
- SMA-FSC adapter for cable assembly.

MM121460

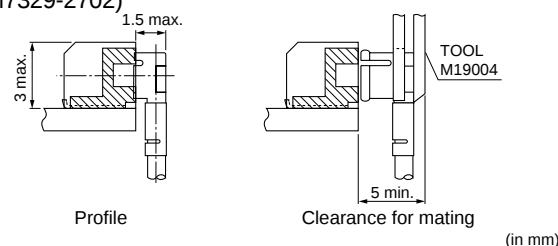


DIMENSIONS

(MM7329-2700)

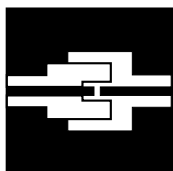


(MM7329-2702)



RATING AND CHARACTERISTICS

Item	Specification
Frequency Range	DC to 3GHz
VSWR	1.2Max. (DC to 2GHz) 1.3Max. (2GHz to 3GHz)
Nominal Impedance	50Ω
Temperature Range	-40°C to +90°C
Voltage Rating	250Vrms
Contact Resistance	15mΩ Max.
Withstanding Voltage	AC300Vrms
Insulation Resistance	500MΩ Min.
Durability	50cycles



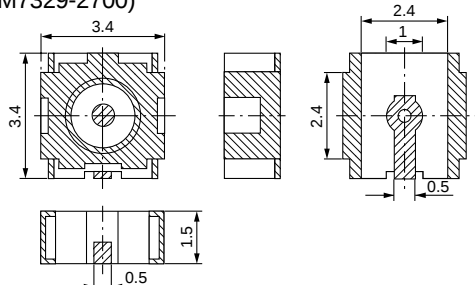
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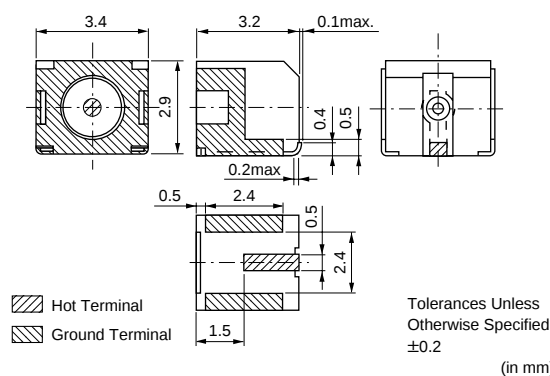
Miniature SMT FSC Type

■ DIMENSIONS (MM7329-2700)

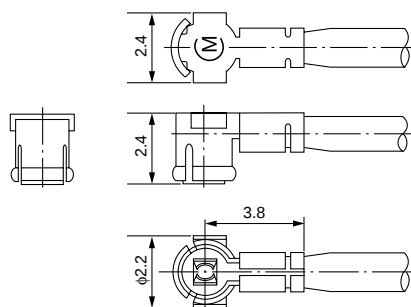
(MM7329-2700)



(MM7329-2702)



■ DIMENSIONS (MXFK81□□□□□□)



Tolerances Unless Otherwise Specified ±0.3 (in mm)

■ MATERIALS AND FINISH

● MM7329-2700/MM7329-2702

Part Name	Materials	Finish
Center Contact	Copper Alloy	Gold plated
Outer Contact	Copper Alloy	Gold plated
Insulator	Engineering plastic	None

● MXFK81□□□□□□

MXFG76□□□□□□

Part Name	Materials	Finish
Center Contact	Copper Alloy	Gold plated
Outer Contact	Copper Alloy	Gold plated
Insulator	Engineering plastic	None

■ PART NUMBERING FOR CABLE ASSEMBLY

(Please specify the part number when ordering.)

 (Ex.)

MX	FK	81	XX	100	0
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 ① ② ③ ④ ⑤ ⑥

① Cable assembly

②④ Connector code

Code	Connector
FK	FSC type Plug connector (for 81 cable)
FG	FSC type Plug connector (for 76 cable)
XX	None

③ Cable code (See cable list on page 23 to 24 for detail.)

Code	Cable	Outer Diameter	Outer conductor construction	Insulation material	Minimum Bending radius
81	0.4D (*)	0.8mm	Single shield	FEP	4.8mm
76	0.8D (*)	1.25mm	Single shield	FEP	6mm

(*) Based on Japanese Industrial Standard (JIS).

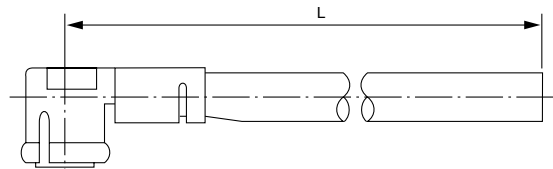
⑤⑥ Full length of cable assembly

 Length (mm) = ⑤×10^⑥

 Ex. : 500mm = 500×10⁰→5000

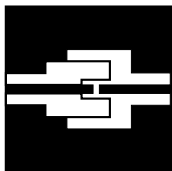
 1000mm = 100×10¹→1001

■ CABLE LENGTH TOLERANCE



Cable Length L (mm) (*)		Dimensional tolerance (mm)
Over	Till	
40	100	± 3
100	500	± 4
500	1000	±10
1000	—	+2% of L -0% of L

*L must be 20mm Min.



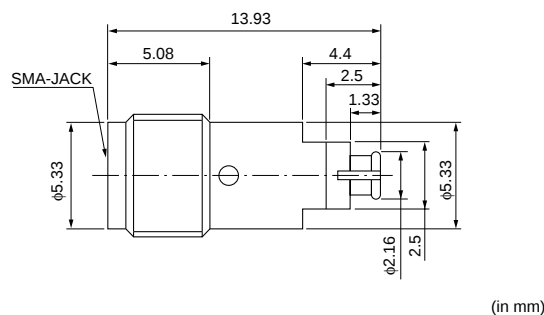
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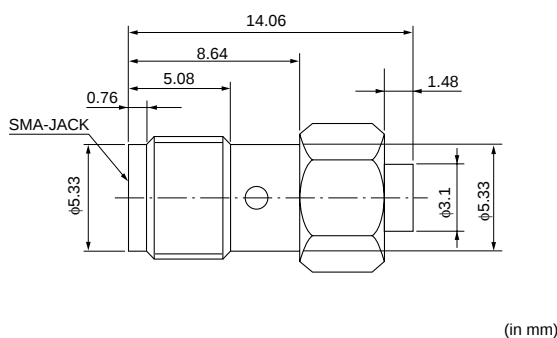
Miniature SMT FSC Type

■SMA-FSC ADAPTERS

MM121454 (For FSC type receptacle)



MM121460 (For FSC type cable assembly)



■NOTICE

Disaccord with following notes could give mechanical damage and/or poor electrical performance.

1. Mechanical Stress :

Stress to the connector should be limited as shown Fig.1.

2. PCB mount pattern dimension :

Dimensions shown in Fig. 2 should be used for the PCB design.

3. Disengagement and engagement.

Use tool P/N M19000 or M19004 (Fig.3). The connector to be disengaged and engaged should be pulled out or insert to the vertical direction using the tool. Do not try to pull out by the cable, because there is the possibility a wire breaks.

4. Cable and connector handling :

Do not give a twisted torque to the cable and connector.

5. Reflow soldering condition :

Reflow soldering should be carried out according to condition as shown in Fig.4.

And the eutectic solder should be used.

6. When MM7329-2700/MM7329-2702 was soldered on P.C.B.,

•Use Rosin based flux, but not with strong acid flux (Chlorine content should be less than 0.20wt%).

•Flux should be cleaned thoroughly.

7. Washing :

In case of cleaning the receptacle, please dry out the receptacle immediately after cleaning.

Do not wash cable assembly.

8. Storage of temperature and humidity.

Temperature : -10 to +40°C

Humidity : 30-80%RH

■STRESS TO THE CONNECTOR (Fig.1)

1. Stress to the housing

Stress A and B : 4.9N (0.5kgf) max.

2. Stress to the outer sleeve.

Stress C : 2.94N (0.3kgf) max.

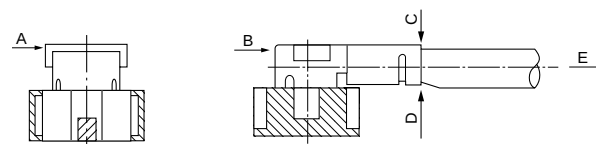
Stress D : 1.96N (0.2kgf) max.

3. Cable pull strength.

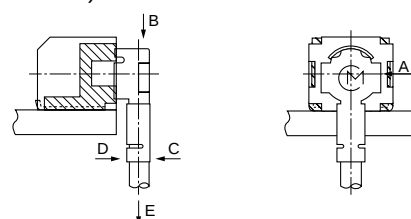
Stress E : 4.9N (0.5kgf) max. (for 81 cable)

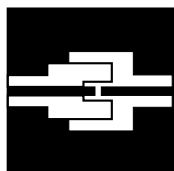
: 7.84N (0.8kgf) max. (for 76 cable)

(MM7329-2700)



(MM7329-2702)

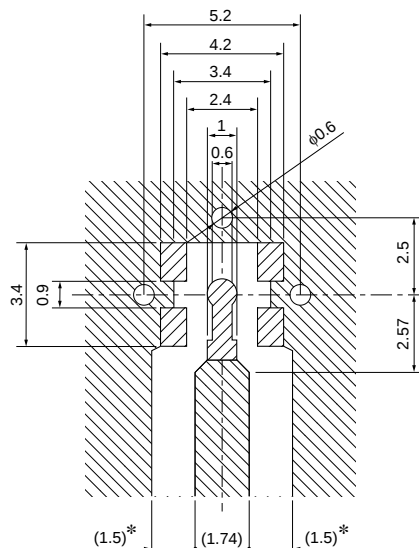




Miniature SMT **FSC** Type

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(MM7329-2700)

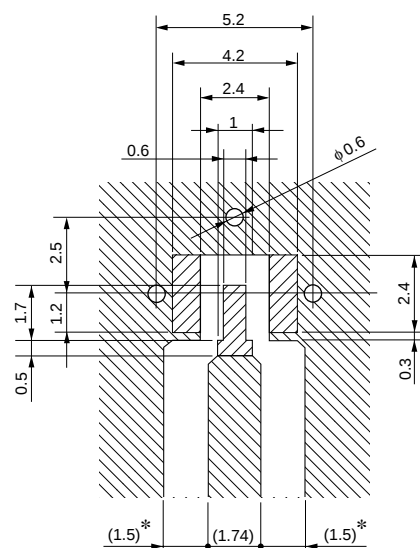


 LAND
 ELECTRODE

(Note) ● Please design I/O pattern* so that the impedance matches 50 ohm including the land pattern.

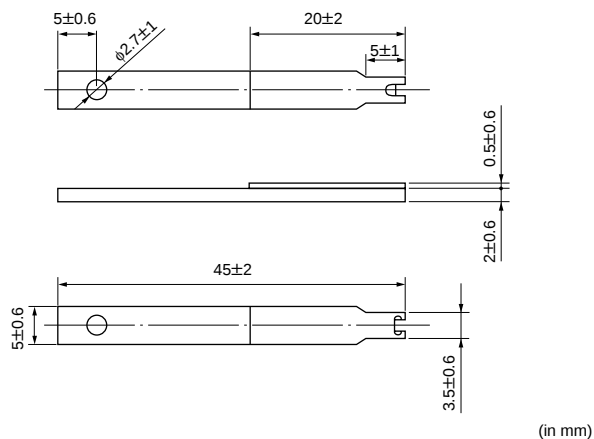
- The material of P.C.B. is the epoxy resin of glass fabric base. ($\epsilon_r = 4.8$) Thickness is 1.0 mm.
- The solder resist should be printed except for the land pattern on the P.C.B.

(MM7329-2702)

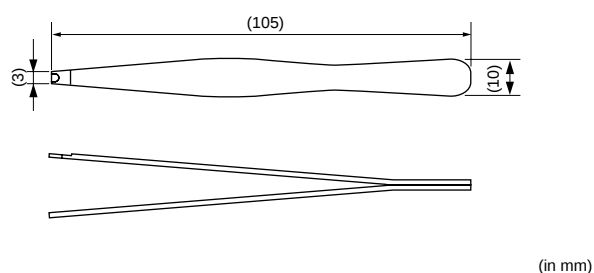


(in mm)

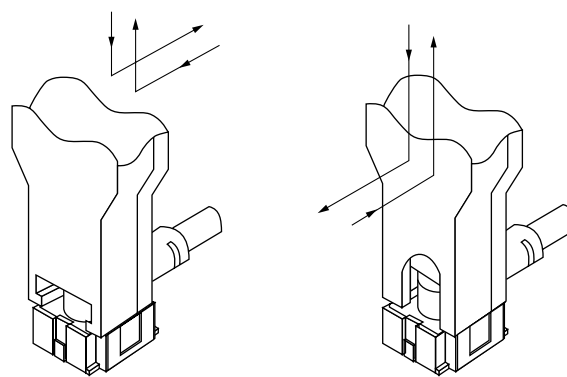
M19000 (for MM7329-2700)



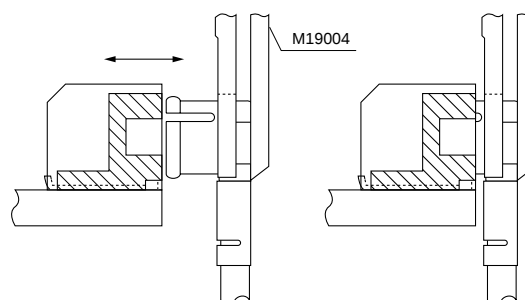
M19004 (for MM7329-2702)

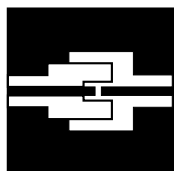


How to use tool (for MM7329-2700)



How to use tool (for MM7329-2702)





Miniature SMT **FSC** Type



Allowable Temperature and Time of Reflow Soldering

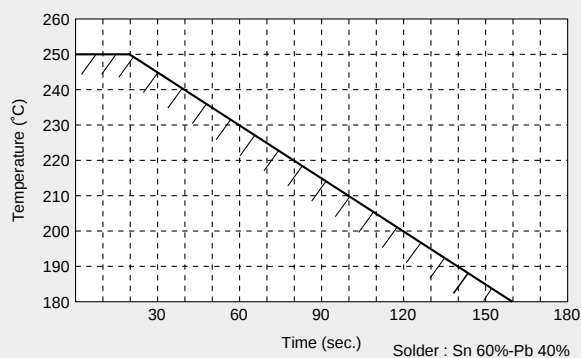
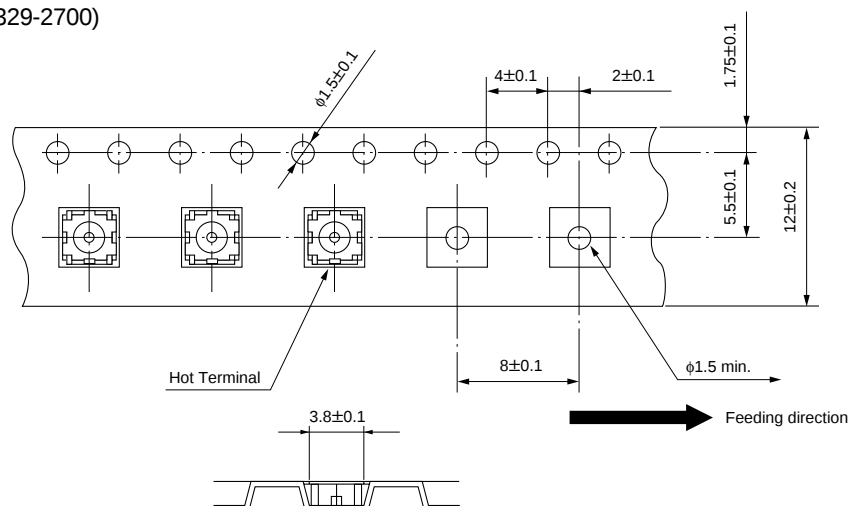


Figure 1 is a line graph showing the temperature profile for the heat treatment of the alloy. The y-axis represents Temperature in degrees Celsius (°C), ranging from 0 to 220. The x-axis represents Time in seconds (sec.). The profile starts at 20°C, rises to 150°C (labeled 'Pre-heating 150±10°C'), and then holds at 150°C for 60-120 seconds. After the hold, the temperature rises to a peak of 225±5°C. The cooling phase is divided into two regions: 20-40 seconds maximum and 10 seconds maximum.

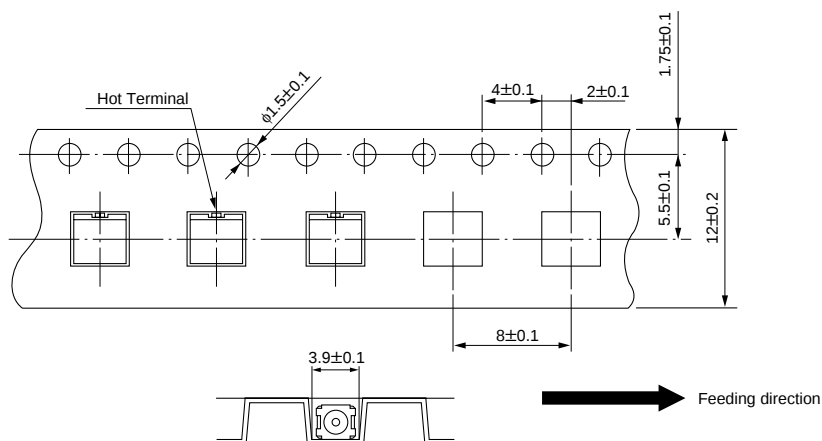
- Measuring point of temperature in-out terminals of the device
- Reflow Soldering
- Both convection and infrared rays
- Hot air
- Hot plate

(MM7329-2700)



(in mm)

(MM7329-2702)



(in mm)